



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,675	09/05/2003	Steven Simon	8473-000001	8802

27572 7590 01/13/2005

HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. BOX 828  
BLOOMFIELD HILLS, MI 48303

EXAMINER

TRAN, DALENA

ART UNIT PAPER NUMBER

3661

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Ph

<b>Office Action Summary</b>	<b>Application No.</b> 10/656,675	<b>Applicant(s)</b> SIMON ET AL.	
	<b>Examiner</b> Dalena Tran	<b>Art Unit</b> 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,12-17 and 19-23 is/are rejected.
- 7) ☒ Claim(s) 2,11 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **Notice to Applicant(s)**

1. This application has been examined. Claims 1-23 are pending.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,3-4,6-7,9,17, and 19-20, are rejected under 35 U.S.C.103(a) as being unpatentable over Gunderson et al. (US 2003/0141965 A1) in view of Delcheccolo et al. (6,784,828).

As per claim 1, Gunderson et al. disclose a collision avoidance system for a vehicle, comprising: a warning device (see at least the abstract), and a plurality of sensors that are arranged around the vehicle and that have sensing zones, wherein each of sensors sense objects that are located in respective ones of sensing zones and generate sensor signals that are related to a distance between respective ones of sensors and the objects located in sensing zones (see at least [0040]; [0044] through [0047]; and [0054] through [0057]). Gunderson et al. do not disclose plurality of profiles. However, Delcheccolo et al. disclose memory that stores a plurality of profiles, wherein each of profiles defines at least one alarm limit for each sensors (see at least columns 4-5, lines 45-63), and a vehicle collision avoidance controller that communicates with plurality of sensors and that triggers warning device when sensor signal that is associated with one of plurality of sensors exceeds a respective one of alarm limits in selected

Art Unit: 3661

profile (see at least columns 6-7, lines 46-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Gunderson et al. by combining plurality of profiles to detect proximity limit of obstacles in the path of the vehicle and immediately issue a warning when encounter danger.

As per claim 3, Delcheccolo et al. disclose security module that restrict access to profiles based on a security protocol (see at least columns 5-6, lines 55-33).

As per claim 4, Gunderson et al. disclose at least one of plurality of sensors wirelessly communicates with vehicle collision avoidance controller (see at least [0020] through [0022]; and [0075] through [0077]).

As per claim 6, Gunderson et al. disclose a configuration module that automatically configures collision avoidance system when sensors are connected to vehicle collision avoidance controller (see at least [0044]).

As per claim 7, Gunderson et al. disclose warning device includes a display that concurrently displays a status of sensors (see at least [0047] through [0049]).

As per claim 9, Gunderson et al. disclose sensors are located at least one of a front of vehicle, on sides of vehicle, a rear of vehicle, on side of a device connected to vehicle, and on a rear of device connected to vehicle (see at least [0010]).

Claims 17, and 19-20, are method claims corresponding to system claims 1, and 3-4 above. Therefore, they are rejected for the same rationales set forth as above.

4. Claims 5,10,12-14,16, and 21-22, are rejected under 35 U.S.C.103(a) as being unpatentable over Gunderson et al. (US 2003/0141965 A1), and Delcheccolo et al. (6,784,828) as applied to claim 1 above, and further in view of Lutter et al. (US 2003/0212480 A1).

Art Unit: 3661

As per claim 5, Gunderson et al., and Delcheccolo et al. do not disclose a vehicle positioning system. However, Lutter et al. disclose a vehicle positioning system that generates vehicle position signals identifying a position of vehicle relative to a fixed coordinate system (see at least [0029], [0030], [0032], and [0033]), and an automatic profile selection module that receives position signals and that automatically selects one of profile based on position signals (see at least [0023] through [0026]; and [0036] through [0039]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Gunderson et al., and Delcheccolo et al. by combining vehicle positioning system to detect vehicle location and issue warning signal.

Claim 10 is a combination of claims 1 and 5, therefore, it is reject as the same as above.

Claims 12-13,14, and 16, are the same as claims 2-3,7, and 9, therefore, it is reject as the same as above.

Claims 21-22, are method claims corresponding to system claims 5-6 above. Therefore, they are rejected for the same rationales set forth as above.

5. Claims 8,15, and 23, are rejected under 35 U.S.C.103(a) as being unpatentable over Gunderson et al. (US 2003/0141965 A1), and Delcheccolo et al. (6,784,828) as applied to claim 7 above, and further in view of Reeves et al. (6,606,027).

As per claim 8, Gunderson et al., and Delcheccolo et al. do not disclose different visual states. However, Reeves et al. disclose display includes red, green, and blue visual states for each sensors (see at least columns 2-3, lines 36-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Gunderson et

Art Unit: 3661

al., and Delcheccolo et al. by combining different visual states display for easily differentiate between impact on different side of the vehicle and to issue an appropriate warning signal.

Claim 15, is the same as claim 8, therefore, it is reject as the same as above.

Claim 23, is method claim corresponding to system claim 8 above. Therefore, it is rejected for the same rationales set forth as above.

6. Claims 2,11, and 18, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### **Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

. Shisgal et al. (5,574,426)

. Francis et al. (6,390,498)

. Feser et al. (6,711,485)

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Dalena Tran

A handwritten signature in cursive script that reads "Dalena Tran".

January 7, 2005